2008 *MP* Index

A Guide to *MP* Volume 47 2008 Subject Index

This is an alphabetical listing of primary topics included in Volume 47 of *MP*. Subject classifications are followed by issue number, then page number. An alphabetized list of authors appears on p. 97.

Abrasive blasting
Optimizing Blasting Parameters to Achieve High Yields 1-48

Amine blush
Case History: Amine Blush in Epoxy Coatings 11-52

Annulus corrosion
A Well Casing Corrosion Database 4-50

Anode
Choosing the Right Anode for Cathodic Protection of Historic Bridges and Buildings 1-34
Estimating Anode Consumption in Seawater from Cathode Potential 2-32
Magnesium Anode Quality—Part 2.....8-36
Protecting an Existing Ductile Iron Water Main Using Linear Anodes 1-38

Anode, conductive coating
Choosing the Right Anode for Cathodic Protection of Historic Bridges and Buildings 1-34

Anode, consumption
Estimating Anode Consumption in Seawater from Cathode Potential 2-32

Anode, linear
Protecting an Existing Ductile Iron Water Main Using Linear Anodes 1-38

Anode, magnesium
Magnesium Anode Quality—Part 2.....8-36

Anode, mixed metal oxide
Choosing the Right Anode for Cathodic Protection of Historic Bridges and Buildings 1-34
Impressed Current Cathodic Protection of Hot Water Storage Tanks.....10-27
Protecting an Existing Ductile Iron Water Main Using Linear Anodes 1-38

Anode, probe
Choosing the Right Anode for Cathodic Protection of Historic Bridges and Buildings 1-34

Anode, ribbon
Choosing the Right Anode for Cathodic Protection of Historic Bridges and Buildings 1-34

Anode, sacrificial
Estimating Anode Consumption in Seawater from Cathode Potential 2-32

Anodic protection
Anodic Protection of NO_x-Contaminated Sulfuric Acid Tanks.....3-34

Asset management
Case History: Enhancing Asset Value Through Corrosion Management.....12-66
Corrosion Management for Oil and Gas Assets 8-54
Improving Asset Corrosion Management Using KPIs 5-50

Ballast tanks
Optimizing Blasting Parameters to Achieve High Yields 1-48

Boiler tubes
Failure Analysis: Failure of a Column Reboiler in a MEG Recovery Unit.....8-66
Failure Analysis: Short-Term Overheating of Baffle Boiler Tubes.....4-56
Selecting Tubing Materials for Power Generation Heat Exchangers.....9-58

Case history
Amine Blush in Epoxy Coatings 11-52
Advanced Coatings for Water Treatment Plant Components 12-40
Case History: Enhancing Asset Value Through Corrosion Management.....12-66
Effective Rehabilitation Planning for a Natural Gas Transmission Line—Part 1.....6-44
Effective Rehabilitation Planning for a Natural Gas Transmission Line—Part 2.....9-40
Developing Welding Procedures for Sour Service.....10-44
Investigating Polyethylene-Encased Ductile Iron Pipelines.....10-49

Cathodic protection
A Well Casing Corrosion Database 4-50
AC Mitigation Using Shield Wires and Decoupling Devices 5-36
Case History: Effective Rehabilitation Planning for a Natural Gas Transmission Line—Part 1.....6-44
Case History: Effective Rehabilitation Planning for a Natural Gas Transmission Line—Part 2.....9-40
Choosing the Right Anode for Cathodic Protection of Historic Bridges and Buildings 1-34
Failure Analysis of a 30-in Subsea Oil Pipeline 12-52
How 'Vagrant Current' Became Impressed Current Cathodic Protection—Part 1 11-36
How 'Vagrant Current' Became Impressed Current Cathodic Protection—Part 2 12-34
Impressed Current Cathodic Protection of Hot Water Storage Tanks.....10-27
In Situ Corrosion Protection of Oil Risers and Offshore Piles 4-38
Phorgotten Phenomena: The Strange Case of the Intermittent Condition 4-34
Phorgotten Phenomena: Using Impressed Current Cathodic Protection in Urban Areas 3-40
Protecting an Existing Ductile Iron Water Main Using Linear Anodes 1-38
Remote Monitoring of Cathodic Protection Sites by Radio Frequency 6-34

Cathodic protection, impressed current
Choosing the Right Anode for Cathodic Protection of Historic Bridges and Buildings 1-34
How 'Vagrant Current' Became Impressed Current Cathodic Protection—Part 1 11-36
How 'Vagrant Current' Became Impressed Current Cathodic Protection—Part 2 12-34
Impressed Current Cathodic Protection of Hot Water Storage Tanks.....10-27
Phorgotten Phenomena: Using Impressed Current Cathodic Protection in Urban Areas 3-40

Cathodic protection, monitoring
Remote Monitoring of Cathodic Protection Sites by Radio Frequency 6-34

Cathodic protection, pipeline
AC Mitigation Using Shield Wires and Decoupling Devices 5-36

2008 *MP* Index

Case History: Effective Rehabilitation Planning for a Natural Gas Transmission Line—Part 1 6-44
Case History: Effective Rehabilitation Planning for a Natural Gas Transmission Line—Part 2 9-40
Phorgotten Phenomena: The Strange Case of the Intermittent Condition 4-34
Remote Monitoring of Cathodic Protection Sites by Radio Frequency 6-34

Cathodic protection, seawater
Estimating Anode Consumption in Seawater from Cathode Potential 2-32
In Situ Corrosion Protection of Oil Risers and Offshore Piles 4-38

Cathodic protection, steel
Estimating Anode Consumption in Seawater from Cathode Potential 2-32
Impressed Current Cathodic Protection of Hot Water Storage Tanks....10-27
In Situ Corrosion Protection of Oil Risers and Offshore Piles 4-38

Chloride
Selecting Tubing Materials for Power Generation Heat Exchangers....9-58
The Need for Stainless Steel with Corrosion Properties Beyond Super Duplex 1-66

Coatings
Behavior of Thermal-Sprayed Al, Zn, and Zn/Al Coatings in Tropical Marine Environments 11-42
Case History: Advanced Coatings for Water Treatment Plant Components....12-40
Case History: Amine Blush in Epoxy Coatings 11-52
Case History: Effective Rehabilitation Planning for a Natural Gas Transmission Line—Part 1 6-44
Case History: Effective Rehabilitation Planning for a Natural Gas Transmission Line—Part 2 9-40
Choosing the Right Anode for Cathodic Protection of Historic Bridges and Buildings 1-34
Fluorescent Coatings and Black Light Inspection 11-48
In Situ Corrosion Protection of Oil Risers and Offshore Piles 4-38
Optimizing Blasting Parameters to Achieve High Yields 1-48
Performance of Alumina-Rich Epoxy-Coated Galvanealed Steel in Blended Fuel Service 6-48
Phorgotten Phenomena: Coating of Faying Surfaces 2-40
Phorgotten Phenomena: Inorganic Zincs—How Do They Cure?....5-42
Phorgotten Phenomena: Predicting Coating Life 3-46
Phorgotten Phenomena: Preventing Mechanical Damage Makes Good 'Cents'! 8-44
Protective Coatings Nondestructive Testing 4-44
Waterborne Resins for Direct-to-Metal Coatings 3-44

Coating surface preparation
Optimizing Blasting Parameters to Achieve High Yields 1-48

Coating, concrete
Case History: Advanced Coatings for Water Treatment Plant Components....12-40

Coating, conductive anode
Choosing the Right Anode for Cathodic Protection of Historic Bridges and Buildings 1-34

Coating, epoxy
Case History: Amine Blush in Epoxy Coatings 11-52
Performance of Alumina-Rich Epoxy-Coated Galvanealed Steel in Blended Fuel Service 6-48

Coating, faying
Phorgotten Phenomena: Coating of Faying Surfaces 2-40

Coating, fluorescent
Fluorescent Coatings and Black Light Inspection 11-48

Coating, inorganic zinc
Phorgotten Phenomena: Inorganic Zincs—How Do They Cure?....5-42

Coating, metal
Behavior of Thermal-Sprayed Al, Zn, and Zn/Al Coatings in Tropical Marine Environments 11-42
Waterborne Resins for Direct-to-Metal Coatings 3-44

Coating, pipeline
Case History: Effective Rehabilitation Planning for a Natural Gas Transmission Line—Part 1 6-44
Case History: Effective Rehabilitation Planning for a Natural Gas Transmission Line—Part 2 9-40

Coating, steel
Case History: Advanced Coatings for Water Treatment Plant Components....12-40
In Situ Corrosion Protection of Oil Risers and Offshore Piles 4-38
Phorgotten Phenomena: Coating of Faying Surfaces 2-40

Coating, volatile organic compounds
Waterborne Resins for Direct-to-Metal Coatings 3-44

Coating, zinc primer
Behavior of Thermal-Sprayed Al, Zn, and Zn/Al Coatings in Tropical Marine Environments 11-42
Phorgotten Phenomena: Coating of Faying Surfaces 2-40
Phorgotten Phenomena: Inorganic Zincs—How Do They Cure?....5-42

Concrete
Case History: Advanced Coatings for Water Treatment Plant Components....12-40

Conductive coupling
AC Mitigation Using Shield Wires and Decoupling Devices 5-36

Continuous mitigation
AC Mitigation Using Shield Wires and Decoupling Devices 5-36

Cooling system
A Green Corrosion Inhibitor for Soft, Low-Alkalinity Water in a Recirculating Cooling System 9-50

Cooling tower fills
Fouling Control of PVC Film-Type Cooling Tower Fills at Power Plants 2-50

Corrosion inhibitors
A Green Corrosion Inhibitor for Soft, Low-Alkalinity Water in a Recirculating Cooling System 9-50
Effect of Volatile Corrosion Inhibitors on the Operation of Electric Motors 6-60
Heat Treatment of Synthetic Polymers as $CaCO_3$ Inhibitors—Part I 2-46
Heat Treatment of Synthetic Polymers as $CaCO_3$ Inhibitors—Part II 3-50

Corrosion inhibitors, non-phosphorus
A Green Corrosion Inhibitor for Soft, Low-Alkalinity Water in a Recirculating Cooling System 9-50

Corrosion measurement
Abnormal Ultrasonic Data: Internal Pit Growth or Measurement Error? 2-58
In Situ Simulation of Accelerated Corrosion in French Marine Ports ...10-32

Corrosion morphology
Premium Connection Downhole Tubing Corrosion....5-66

Corrosion, direct cost
Catastrophic Corrosion Failures and Corrosion Management 4-62

Corrosion, indirect cost
Catastrophic Corrosion Failures and Corrosion Management 4-62

2008 *MP* Index

Corrosion, key performance indicators
Improving Asset Corrosion Management Using KPIs 5-50

Corrosion, localized
Failure Analysis: Failure of a Column Reboiler in a MEG Recovery Unit 8-66
Phorgotten Phenomena: Catastrophic Oxidation of Stainless and Nickel Alloys 8-64

Corrosion, management
Case History: Enhancing Asset Value Through Corrosion Management 12-66
Catastrophic Corrosion Failures and Corrosion Management 4-62
Corrosion Management for Oil and Gas Assets 8-54
Geographic Power Engineering for Electric Power Companies 9-34
Improving Asset Corrosion Management Using KPIs 5-50

Corrosion, stress corrosion cracking
Failure Analysis: Role of Surface Finish in Fatigue Failure of Type 316L Stainless Steel Coil Tube 8-70
Failure Analysis: SCC Failure of a Super Duplex Separator Vessel in an Ammonium Nitrate Plant 9-64
Failure Analysis: Stress Corrosion Cracking of a Vinyl Chloride Stripper Vessel 6-74
Selecting Tubing Materials for Power Generation Heat Exchangers 9-58

Corrosion, sulfide stress cracking
Case History: Developing Welding Procedures for Sour Service 10-44
Failure Analysis: Stress Cracking of Stainless Steel Safety Gate Valve Stem 2-64

Crack propagation
Failure Anal, sis of a Turbine Main Oil Pump-Driven Gear 9-70
Failure Analysis: Oil Refining Heater Tube Failures from Internal Overheating and Melting 12-60
Failure Analysis: Part II—Case Histories 1-72
Failure Analysis: Role of Surface Finish in Fatigue Failure of Type 316L Stainless Steel Coil Tube 8-70

Crevice corrosion
Failure Analysis: Failure of a Column Reboiler in a MEG Recovery Unit 8-66
Selecting Tubing Materials for Power Generation Heat Exchangers 9-58
The Need for Stainless Steel with Corrosion Properties Beyond Super-Duplex 1-66

Database
A Well Casing Corrosion Database 4-50

Downhole tubing
Premium Connection Downhole Tubing Corrosion 5-66

Ductile iron
Case History: Investigating Polyethylene-Encased Ductile Iron Pipelines 10-49
Protecting an Existing Ductile Iron Water Main Using Linear Anodes 1-38

Electrical current
AC Mitigation Using Shield Wires and Decoupling Devices 5-36
How 'Vagrant Current' Became Impressed Current Cathodic Protection—Part 1 11-36
How 'Vagrant Current' Became Impressed Current Cathodic Protection—Part 2 12-34

Ethanol
Performance of Alumina-Rich Epoxy-Coated Galvanealed Steel in Blended Fuel Service 6-48

Failure Analysis
Failure Analysis of a 30-in Subsea Oil Pipeline 12-52
Failure Analysis of a Turbine Main Oil Pump-Driven Gear 9-70
Failure Analysis of Stainless Steel Piping at an Offshore Platform 5-62
Failure Analysis: Part II—Case Histories 1-72
Failure of a Column Reboiler in a MEG Recovery Unit 8-66
Oil Refining Heater Tube Failures from Internal Overheating and Melting 12-60
Premium Connection Downhole Tubing Corrosion 5-66
Role of Surface Finish in Fatigue Failure of Type 316l Stainless Steel Coil Tube 8-70
SCC Failure of a Super Duplex Separator Vessel in an Ammonium Nitrate Plant 9-64
Short-Term Overheating of Baffle Boiler Tubes 4-56
Stress Corrosion Cracking of a Vinyl Chloride Stripper Vessel 6-74
Stress Cracking of Stainless Steel Safety Gate Valve Stem 2-64

Faying surfaces
Phorgotten Phenomena: Coating of Faying Surfaces 2-40

Feature articles (various subjects)
Dry Air Combats Corrosion on Suspension Bridge Cable 4-30
Feedermain Rupture Sparks Pipeline Assessment Program 6-28
Jackets Wrap Bridge Piles with Cathodic Protection 1-30
Multifaceted Approach Mitigates Corrosion of New Wastewater System 5-30
Mystery in Minnesota—Part 2 10-22
NACE and the DoD Join Forces to Fight Corrosion 12-30
New Legislation Focuses on Extending the Life of Highway Bridges 8-30
Results of the 2008 NACE International Corrosion Career Survey 7-116
Share Your Corrosion Experiences 9-30
Statue's 'Heartbeat' Sends Messages on Structural Corrosion 3-30
The Pentagon Memorial: Designed with Corrosion in Mind 11-30

Fouling, cooling towers
Fouling Control of PVC Film-Type Cooling Tower Fills at Power Plants 2-50

Galvanealed steel
Performance of Alumina-Rich Epoxy-Coated Galvanealed Steel in Blended Fuel Service 6-48

Gauges, strain
Geographic Power Engineering for Electric Power Companies 9-34

Gear
Failure Analysis of a Turbine Main Oil Pump-Driven Gear 9-70

Geographic power engineering
Geographic Power Engineering for Electric Power Companies 9-34

GIS
Geographic Power Engineering for Electric Power Companies 9-34

Heat exchangers
Selecting Tubing Materials for Power Generation Heat Exchangers 9-58

Heat treatment
Effect of Iron Contamination on the Corrosion Resistance of Titanium in Nitric Acid 11-64
Heat Treatment of Synthetic Polymers as $CaCO_3$ Inhibitors—Part I 2-46
Heat Treatment of Synthetic Polymers as $CaCO_3$ Inhibitors—Part II 3-50

Heat-affected zone
Case History: Developing Welding Procedures for Sour Service 10-44
Effect of Iron Contamination on the Corrosion Resistance of Titanium in Nitric Acid 11-64

2008 *MP* Index

Failure Analysis: SCC Failure of a Super Duplex Separator Vessel in an Ammonium Nitrate Plant 9-64

Heat-resistant alloy
Oxidation of Commercial Heat-Resistant Alloys....6-68

Historic
Choosing the Right Anode for Cathodic Protection of Historic Bridges and Buildings....1-34
How 'Vagrant Current' Became Impressed Current Cathodic Protection—Part 1....11-36
How 'Vagrant Current' Became Impressed Current Cathodic Protection—Part 2....12-34

Hydrogen embrittlement
Effect of Iron Contamination on the Corrosion Resistance of Titanium in Nitric Acid....11-64

Hydrogen sulfide
Case History: Developing Welding Procedures for Sour Service....10-44
Failure Analysis of a 30-in Subsea Oil Pipeline....12-52
Innovative Design and Operation of a Multi-Phase Fluid Simulation Test Rig....10-40
Stress Cracking of Stainless Steel Safety Gate Valve Stem....2-64

Impressed current cathodic protection
Choosing the Right Anode for Cathodic Protection of Historic Bridges and Buildings....1-34
How 'Vagrant Current' Became Impressed Current Cathodic Protection—Part 1....11-36
How 'Vagrant Current' Became Impressed Current Cathodic Protection—Part 2....12-34
Impressed Current Cathodic Protection of Hot Water Storage Tanks....10-27
Phorgotten Phenomena: Using Impressed Current Cathodic Protection in Urban Areas....3-40

Inductive coupling
AC Mitigation Using Shield Wires and Decoupling Devices....5-36

Infrastructure
Geographic Power Engineering for Electric Power Companies....9-34
In Situ Simulation of Accelerated Corrosion in French Marine Ports....10-32
Protecting an Existing Ductile Iron Water Main Using Linear Anodes....1-38
Use of Octadecylamine for Shutdown Protection at Power Plants....1-58

Inhibitors
A Green Corrosion Inhibitor for Soft, Low-Alkalinity Water in a Recirculating Cooling System....9-50
Effect of Volatile Corrosion Inhibitors on the Operation of Electric Motors....6-60
Heat Treatment of Synthetic Polymers as $CaCO_3$ Inhibitors—Part I....2-46
Heat Treatment of Synthetic Polymers as $CaCO_3$ Inhibitors—Part II....3-50

Inhibitors, corrosion
A Green Corrosion Inhibitor for Soft, Low-Alkalinity Water in a Recirculating Cooling System....9-50
Effect of Volatile Corrosion Inhibitors on the Operation of Electric Motors....6-60
Heat Treatment of Synthetic Polymers as $CaCO_3$ Inhibitors—Part I....2-46
Heat Treatment of Synthetic Polymers as $CaCO_3$ Inhibitors—Part II....3-50

Inhibitors, non-phosphorus
A Green Corrosion Inhibitor for Soft, Low-Alkalinity Water in a Recirculating Cooling System....9-50

Inhibitors, synthetic polymers
Heat Treatment of Synthetic Polymers as $CaCO_3$ Inhibitors—Part I....2-46
Heat Treatment of Synthetic Polymers as $CaCO_3$ Inhibitors—Part II....3-50

Inspection
Case History: Enhancing Asset Value Through Corrosion Management....12-66
Fluorescent Coatings and Black Light Inspection....11-48

Mapping
Geographic Power Engineering for Electric Power Companies....9-34

Marine
Behavior of Thermal-Sprayed Al, Zn, and Zn/Al Coatings in Tropical Marine Environments....11-42
In Situ Corrosion Protection of Oil Risers and Offshore Piles....4-38
In Situ Simulation of Accelerated Corrosion in French Marine Ports....10-32

Materials selection
Innovative Design and Operation of a Multi-Phase Fluid Simulation Test Rig....10-40
Selecting Tubing Materials for Power Generation Heat Exchangers....9-58

Measurement
Abnormal Ultrasonic Data: Internal Pit Growth or Measurement Error?....2-58
In Situ Simulation of Accelerated Corrosion in French Marine Ports....10-32

Metal cladding
In Situ Corrosion Protection of Oil Risers and Offshore Piles....4-38

Metal fatigue
Failure Analysis of a Turbine Main Oil Pump-Driven Gear....9-70

Microbiologically influenced corrosion
Circumstances Where Biocides May Be Ineffective....11-60
Failure Analysis of 30-in Subsea Oil Pipeline....12-52
In Situ Simulation of Accelerated Corrosion in French Marine Ports....10-32
Selecting Tubing Materials for Power Generation Heat Exchangers....9-58

Natural gas
Case History: Effective Rehabilitation Planning for a Natural Gas Transmission Line—Part 1....6-44
Case History: Effective Rehabilitation Planning for a Natural Gas Transmission Line—Part 2....9-40

Nondestructive testing
Failure Analysis: Part II—Case Histories....1-72
Fluorescent Coatings and Black Light Inspection....11-48
Protective Coatings Nondestructive Testing....4-44

Octadecylamine
Use of Octadecylamine for Shutdown Protection at Power Plants....1-58

Offshore
Failure Analysis of a 30-in Subsea Oil Pipeline....12-52
Failure Analysis of Stainless Steel Piping at an Offshore Platform....5-62
In Situ Corrosion Protection of Oil Risers and Offshore Piles....4-38

Oxidation
Oxidation of Commercial Heat-Resistant Alloys....6-68
Phorgotten Phenomena: Catastrophic Oxidation of Stainless and Nickel Alloys....8-64

Phorgotten Phenomena
Catastrophic Oxidation of Stainless and Nickel Alloys....8-64
Coating of Faying Surfaces....2-40
Inorganic Zincs—How Do They Cure?....5-42
Predicting Coating Life....3-46
Preventing Mechanical Damage Makes Good 'Cents'!....8-44

2008 *MP* Index

The Strange Case of the Intermittent Condition 4-34
Using Impressed Current Cathodic Protection in Urban Areas 3-40

Pigging
Case History: Effective Rehabilitation Planning for a Natural Gas Transmission Line—Part 1 6-44
Case History: Effective Rehabilitation Planning for a Natural Gas Transmission Line—Part 2 9-40

Pipelines
AC Mitigation Using Shield Wires and Decoupling Devices 5-36
Case History: Effective Rehabilitation Planning for a Natural Gas Transmission Line—Part 1 6-44
Case History: Effective Rehabilitation Planning for a Natural Gas Transmission Line—Part 2 9-40
Case History: Investigating Polyethylene-Encased Ductile Iron Pipelines 10-49
Failure Analysis of a 30-in Subsea Oil Pipeline 12-52
Innovative Design and Operation of a Multi-Phase Fluid Simulation Test Rig 10-40
Phorgotten Phenomena: The Strange Case of the Intermittent Condition 4-34
Remote Monitoring of Cathodic Protection Sites by Radio Frequency 6-34

Pipeline rehabilitation
Case History: Effective Rehabilitation Planning for a Natural Gas Transmission Line—Part 1 6-44
Case History: Effective Rehabilitation Planning for a Natural Gas Transmission Line—Part 2 9-40

Pipeline, cathodic protection
AC Mitigation Using Shield Wires and Decoupling Devices 5-36
Case History: Effective Rehabilitation Planning for a Natural Gas Transmission Line—Part 1 6-44
Case History: Effective Rehabilitation Planning for a Natural Gas Transmission Line—Part 2 9-40
Phorgotten Phenomena: The Strange Case of the Intermittent Condition 4-34
Remote Monitoring of Cathodic Protection Sites by Radio Frequency 6-34

Pipeline, coating
Case History: Effective Rehabilitation Planning for a Natural Gas Transmission Line—Part 1 6-44
Case History: Effective Rehabilitation Planning for a Natural Gas Transmission Line—Part 2 9-40

Pipeline, inline inspection
Case History: Effective Rehabilitation Planning for a Natural Gas Transmission Line—Part 1 6-44
Case History: Effective Rehabilitation Planning for a Natural Gas Transmission Line—Part 2 9-40

Pipeline, monitoring
Case History: Effective Rehabilitation Planning for a Natural Gas Transmission Line—Part 1 6-44
Case History: Effective Rehabilitation Planning for a Natural Gas Transmission Line—Part 2 9-40
Remote Monitoring of Cathodic Protection Sites by Radio Frequency 6-34

Pipeline, polyethylene-encasement
Case History: Investigating Polyethylene-Encased Ductile Iron Pipelines 10-49

Pitting corrosion
Abnormal Ultrasonic Data: Internal Pit Growth or Measurement Error? 2-58
Failure Analysis of a 30-in Subsea Oil Pipeline 12-52
Protecting an Existing Ductile Iron Water Main Using Linear Anodes 1-38
Selecting Tubing Materials for Power Generation Heat Exchangers 9-58
Testing Corrosion Rates on Steel Piping in Geothermal District Heating 5-56
The Need for Stainless Steel with Corrosion Properties Beyond Super Duplex 1-66

Post weld heat treatment
Case History: Developing Welding Procedures for Sour Service 10-44

Power
Failure Analysis of a Turbine Main Oil Pump-Driven Gear 9-70
Geographic Power Engineering for Electric Power Companies 9-34
Selecting Tubing Materials for Power Generation Heat Exchangers 9-58

Power plant, shutdown
Use of Octadecylamine for Shutdown Protection at Power Plants 1-58

Power plants
Fouling Control of PVC Film-Type Cooling Tower Fills at Power Plants 2-50

Preferential weld attack
Case History: Preferential Weld Corrosion 3-58

Radio frequency
Remote Monitoring of Cathodic Protection Sites by Radio Frequency 6-34

Reinforced concrete
Choosing the Right Anode for Cathodic Protection of Historic Bridges and Buildings 1-34

Reinforced concrete bridge
Choosing the Right Anode for Cathodic Protection of Historic Bridges and Buildings 1-34

Rupture
Failure Analysis of a 30-in Subsea Oil Pipeline 12-52
Failure Analysis: Oil Refining Heater Tube Failures from Internal Overheating and Melting 12-60

Scanning electron microscopy
A Green Corrosion Inhibitor for Soft, Low-Alkalinity Water in a Recirculating Cooling System 9-50
Failure Analysis: Part II—Case Histories 1-72
In Situ Simulation of Accelerated Corrosion in French Marine Ports 10-32

Seawater
Circumstances Where Biocides May Be Ineffective 11-60
Estimating Anode Consumption in Seawater from Cathode Potential 2-32
The Need for Stainless Steel with Corrosion Properties Beyond Super-Duplex 1-66

Seawater, tropical
Behavior of Thermal-Sprayed Al, Zn, and Zn/Al Coatings in Tropical Marine Environments 11-42
The Need for Stainless Steel with Corrosion Properties Beyond Super-Duplex 1-66

Separator vessel
Failure Analysis: SCC Failure of a Super Duplex Separator Vessel in an Ammonium Nitrate Plant 9-64

Stainless steel
Case History: Preferential Weld Corrosion 3-58
Circumstances Where Biocides May Be Ineffective 11-60
Failure Analysis of Stainless Steel Piping at an Offshore Platform 5-62
Failure Analysis: Role of Surface Finish in Fatigue Failure of Type 316L Stainless Steel Coil Tube 8-70
Failure Analysis: SCC Failure of a Super Duplex Separator Vessel in an Ammonium Nitrate Plant 9-64
Failure Analysis: Stress Corrosion Cracking of a Vinyl Chloride Stripper Vessel 6-74
Phorgotten Phenomena: Catastrophic Oxidation of Stainless and Nickel Alloys 8-64

2008 *MP* Index

Stress Cracking of Stainless Steel Safety Gate Valve Stem....2-64

Stainless steel, hyper duplex
The Need for Stainless Steel with Corrosion Properties Beyond Super Duplex....1-66

Steam turbine
Use of Octadecylamine for Shutdown Protection at Power Plants....1-58

Steel
Failure Analysis: Oil Refining Heater Tube Failures from Internal Overheating and Melting....12-60
In Situ Simulation of Accelerated Corrosion in French Marine Ports....10-32

Steel, cathodic protection
Estimating Anode Consumption in Seawater from Cathode Potential....2-32
Impressed Current Cathodic Protection of Hot Water Storage Tanks....10-27

Steel, high performance
The Need for Stainless Steel with Corrosion Properties Beyond Super Duplex....1-66

Steel, piping
A Green Corrosion Inhibitor for Soft, Low-Alkalinity Water in a Recirculating Cooling System....9-50
Innovative Design and Operation of a Multi-Phase Fluid Simulation Test Rig....10-40
Testing Corrosion Rates on Steel Piping in Geothermal District Heating....5-56

Steel, structural
In Situ Simulation of Accelerated Corrosion in French Marine Ports....10-32
Phorgotten Phenomena: Coating of Faying Surfaces....2-40

Stray current
How 'Vagrant Current' Became Impressed Current Cathodic Protection—Part 1....11-36
How 'Vagrant Current' Became Impressed Current Cathodic Protection—Part 2....12-34

Stress corrosion cracking
Failure Analysis: Part II—Case Histories....1-72
Failure Analysis: Role of Surface Finish in Fatigue Failure of Type 316L Stainless Steel Coil Tube....8-70
Failure Analysis: SCC Failure of a Super Duplex Separator Vessel in an Ammonium Nitrate Plant....9-64
Failure Analysis: Stress Corrosion Cracking of a Vinyl Chloride Stripper Vessel....6-74
Selecting Tubing Materials for Power Generation Heat Exchangers....9-58

Stress cracking
Case History: Developing Welding Procedures for Sour Service....10-44
Failure Analysis: Stress Cracking of Stainless Steel Safety Gate Valve Stem....2-64

Sulfate-reducing bacteria
Circumstances Where Biocides May Be Ineffective....11-60
Testing Corrosion Rates on Steel Piping in Geothermal District Heating....5-56

Sulfide stress cracking
Case History: Developing Welding Procedures for Sour Service....10-44
Failure Analysis: Stress Cracking of Stainless Steel Safety Gate Valve Stem....2-64

Sulfuric acid
Anodic Protection of NO_x-Contaminated Sulfuric Acid Tanks....3-34

Synthetic polymers
Heat Treatment of Synthetic Polymers as $CaCO_3$ Inhibitors—Part I....2-46
Heat Treatment of Synthetic Polymers as $CaCO_3$ Inhibitors—Part II....3-50

Tanks
Anodic Protection of NO_x-Contaminated Sulfuric Acid Tanks....3-34
Impressed Current Cathodic Protection of Hot Water Storage Tanks....10-27
Optimizing Blasting Parameters to Achieve High Yields....1-48
Performance of Alumina-Rich Epoxy-Coated Galvanealed Steel in Blended Fuel Service....6-48
Phorgotten Phenomena: Predicting Coating Life....3-46

Tanks, fuel
Performance of Alumina-Rich Epoxy-Coated Galvanealed Steel in Blended Fuel Service....6-48

Testing
Behavior of Thermal-Sprayed Al, Zn, and Zn/Al Coatings in Tropical Marine Environments....11-42
Case History: Investigating Polyethylene-Encased Ductile Iron Pipelines....10-49
Effect of Iron Contamination on the Corrosion Resistance of Titanium in Nitric Acid....11-64
Fluorescent Coatings and Black Light Inspection....11-48
In Situ Simulation of Accelerated Corrosion in French Marine Ports....10-32
Innovative Design and Operation of a Multi-Phase Fluid Simulation Test Rig....10-40
Testing Corrosion Rates on Steel Piping in Geothermal District Heating....5-56

Thermal-sprayed
Behavior of Thermal-Sprayed Al, Zn, and Zn/Al Coatings in Tropical Marine Environments....11-42
Choosing the Right Anode for Cathodic Protection of Historic Bridges and Buildings....1-34

Thermography
Geographic Power Engineering for Electric Power Companies....9-34

Titanium
Effect of Iron Contamination on the Corrosion Resistance of Titanium in Nitric Acid....11-64

Tubes
Failure Analysis: Failure of a Column Reboiler in a MEG Recovery Unit....8-66
Failure Analysis: Oil Refining Heater Tube Failures from Internal Overheating and Melting....12-60
Failure Analysis: Role of Surface Finish in Fatigue Failure of Type 316L Stainless Steel Coil Tube....8-70
Failure Analysis: Short-Term Overheating of Baffle Boiler Tubes....4-56

Tubing
Premium Connection Downhole Tubing Corrosion....5-66

Water main
Protecting an Existing Ductile Iron Water Main Using Linear Anodes....1-38

Water treatment plant
Case History: Advanced Coatings for Water Treatment Plant Components....12-40

Weld corrosion
Case History: Developing Welding Procedures for Sour Service....10-44
Case History: Preferential Weld Corrosion....3-58
Failure Analysis of Stainless Steel Piping at an Offshore Platform....5-62
Failure Analysis: SCC Failure of a Super Duplex Separator Vessel in an Ammonium Nitrate Plant....9-64
Failure Analysis: Stress Corrosion Cracking of a Vinyl Chloride Stripper Vessel....6-74

Well casing
A Well Casing Corrosion Database....4-50

2008 *MP* Index

Author Index

Abdurrahim, A., 8-70
Abusowa, K., 4-56
Aghajani, A., 4-38
Akira, Y., 2-32
Al-Meshari, A., 6-68
Al-Muaili, F., 9-70
Ames, M., 6-44, 9-40
Amin, M., 8 66
Amjad, Z., 2-46, 3-50
Andijani, I.N., 9-70
Auzeby, C., 10-32

Babakr, A., 3-58
Bae, H.J., 1-48
Baek, J.J., 1-48
Baek, K.K., 1-48
Bénaïssa, B., 10-32
Bhaskaran, R., 4-62
Bolookhuu, O., 3-34
Boon, P., 9-64
Breslin, M.R., 10-49
Broomfield, J.P., 1-34
Bushman, J.B., 10-27

Cherian, V., 12-52
Crabtree, D.W., 10-49
Dayal, R.K., 11-64

de Rincón, O., 11-42
Deardorff, J.R., 4-44, 11-48
Doiron, A., 2-58
Dupont, I., 10-32

El-Batahgy, A., 8-66
Elhaddad, F., 8-70
Elshawesh, F., 4-56, 8-70

Fathy, G., 8-66
Fillmore, R., 3-44
Fitzgerald, J.H., 3-40
Frumuselu, D., 9-34

Ge, H.H., 1-58
Göransson, K., 1-66
Grubb, J.F., 8-64
Guden, M., 5-56

Hau, J., 12-60
Holmquist, M., 1-66

Ince, U., 5-56

Jacobsen, G.A., 7-116
Janikowski, D.S., 9-58
Javaherdashti, R., 11-60
Jianmin, X., 5-66
Johnson, M., 1-38
Judice, Jr., K., 8-44

Katarki, M.V., 12-52
Keen, D., 9-64
Kim, K.S., 1-48
Kraim, M., 4-56
Kumar, A., 10-27, 12-40

Larsen, K.R., 1-30, 3-30, 4-30, 5-30, 6-28, 8-30, 9-30, 10-22, 11-30, 12-30
Laycock, N.J., 6-74, 9-64
Lee, B.H., 1-48
Lee, C.S., 1-48
Lefèvre, Y., 10-32
Lewis, M., 11-36, 12-34
Liao, Q.Q., 1-58
Lichtenstein, J., 2-40
Linton, V.M., 6-74, 9-64
Lipton, K.I., 3-44
Little, J.A., 6-68
Liu, X., 9-50

Mahfud, H., 4-56, 8-70
Maldonado, L., 11-42
Malik, A.U., 9-70
Marsset, B., 10-32
May, T., 8-36
McDonald, M.F., 4-50
Mills, G.D., 11-52
Miyate, Y., 2-32
Mobin, M., 9-70
Mochizuki, N., 2-32
Moreno, C., 6-44, 9-40
Moriber, N.J., 4-34
Morris, Jr., J.E., 10-40
Morshed, A., 5-50, 8-54, 12-66
Mostofi, J., 2-64
Mudali, U.K., 11-64

Nazar, A.M., 4-62

Ojeda, M., 6-44, 9-40

Palaniswamy, N., 4-62
Papavinasam, S., 2-58
Pineau, S., 10-32

Raghuvaran, G., 4-62
Ragupathi, K., 11-64
Raj, B., 11-64
Raja, T.S., 4-62
Raiu, V.R., 11-64
Ramirez, J.E., 10-44
Reitz, W., 1-72
Revie, W., 2-58
Rincón, A., 11-42
Romero, N., 11-42
Rout, T.K., 6-48

Salas, O., 11-42
Sanchez, M., 11-42
Scherrer, P., 10-32
Schramuk, J., 1-38
Shim, W.W., 3-34
Shin, C.S., 1-48
Shin, S.R., 1-48
Shuanlu, L., 5-66
Sinha, A., 2-50
Southern, D.J., 6-34
Srivastava, S.K., 12-52
Stephenson, L.D., 10-27, 12-40

Tachick, H., 5-36
Thompson, S.P., 3-46
Toksoy, M., 5-56
Tongguang, Z., 5-66

Utala, E., 6-60
Uzcategui, A., 11-42

Valdivieso, A., 11-42
Veerakumar, M., 4-62
Velu, B., 5-62
Venugopalan, T., 6-48
Vincent, L.D., 5-42

Wakabayashi, T., 2-32
Weintritt, D., 10-40

Xu, S., 9-50
Xunchang, D., 5-66

Yanjun, K., 5-66

Zamaniam, M., 2-64
Zeliang, C., 5-66
Zhou, B., 9-50
Zhou, G.D., 1-58
Zuhl, R.W., 2-46, 3-50